DYSPEA DURING COVID-19

- Usually starts between day 4 and 8 of illness, although also reported later in course
- Can occur without productive cough
- Usually associated with pneumonia, ARDS, decreased lung compliance
- Approximately 30% of people hospitalized with COVID-19 experience dyspnea
- In a study of 101 inpatients with COVID-19 referred to palliative care, 66% experienced dyspnea
- Worse with exertion, even speaking on the phone
- May see very low blood oxygen saturation (low 80%) without dyspnea (called silent hypoxia)
- Assessment is based upon self-report; some can rate using 0-10 scale (0=no breathlessness, 10=severe breathlessness)
- Don’t forget other causes of dyspnea, especially in people with comorbid serious illness:
  - Advanced AIDS, anemia, asthma, cancer, CHF, COPD, heart failure, pulmonary embolism, anxiety/panic attack
  - Nursing assessment, including history and physical exam, can help differentiate possible contribution of these comorbidities

PHARMACOLOGIC PALLIATIVE MANAGEMENT: OPIOIDS

Opioids are the foundation for management of dyspnea for palliative care

- Initial doses for opioid naïve patients:
  - Morphine PO 5mg every 3-4 hours prn (2.5 mg for children)
  - Morphine IV 1-2 mg every 1 hour prn
  - Oxycodone PO 2.5-5 mg every 3-4 hours prn
  - Hydromorphone PO 1-2 mg every 3-4 hours prn
  - Hydromorphone IV 0.2-0.4 mg every 1 hour prn
- Titrate upward by 25-50% if dyspnea unrelieved
- Increase frequency if dose provides relief but is not sustained
  - Every hour for oral administration
  - Every 15 minutes for IV administration
- For patients tolerant to opioids, higher doses may be needed – use equianalgesic table to calculate current 24 hour dose and administer 10-20%; increase gradually

Routes – helpful tips:
- Oral concentrated liquid (such as morphine or oxycodone) may be useful when dyspnea is severe and swallowing tablets difficult; onset of effect similar to oral tablets
- Intravenous or subcutaneous opioid administration may be used during episodes of severe dyspnea requiring faster onset and more rapid titration, or if patient unable to swallow

PHARMACOLOGIC MANAGEMENT: OTHER AGENTS

- Treat underlying cause: antivirals, antibiotics, anticoagulants for PE, diuretics if fluid overload, bronchodilators if bronchospasm
  - Caution – bronchodilators can elevate heart rate and a sense of anxiety or agitation
- Although the urge to give benzodiazepines is strong, these treat only anxiety and may contribute to excess sedation – use only if anxiety is present and opioids have been adequately titrated
  - Lorazepam is recommended due to its relatively short half-life and its availability in liquid form. Dosage: 0.25 mg PO/SL q 4 hours.

REFERENCES

ELNEC –https://www.aacnnursing.org/ELNEC/COVID-19

NONPHARMACOLOGIC MANAGEMENT

- Distraction/music/calming environment
- Education
- Oxygen – use only with hypoxia – target is SpO2 of ≥ 90%
- Positioning – upright, bracing forward for symptom control (prone position used in hospital/ICU)
- Purse lip or abdominal breathing
- Relaxation/mindfulness
- Spiritual care

DON’T FORGET TO SEEK SUPPORT FROM OTHER TEAM MEMBERS, INCLUDING:
- Chaplains
- Music/art therapists
- Physicians
- Psychologists
- Respiratory therapists
- Social workers

*See aacnnursing.org/ELNEC/COVID-19 for a list of apps and other resources to assist with meditation, mindfulness, distraction and relaxation techniques

END OF LIFE NURSING EDUCATION COALITION
Advancing Palliative Care

Supported by funding to the ELNEC project by the Cambia Health Foundation
aacnnursing.org/ELNEC/COVID-19

v1 May 2020